

# P **Hypericum perforatum**

## Common Name(s)

Common St. Johnswort, Goatweed, Hypericum, Klamath Weed, St. John's-wort

## How Used

M

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
30	(+)-CATECHIN	Plant	--	--		
0	(+)-EPICATECHIN	Plant	--	--	Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.	
38	(-)-EPICATECHIN	Plant	--	--	Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.	
0	(E)-BETA-FARNESENE	Plant	0.5	9	-0.698672340478706	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	(E)-OCIMENE	Plant	0.1	2.25		
0	(Z)-OCIMENE	Plant	0.25	4.5		
0	1(3)-11(8)-BIAPIGENIN	Shoot	--	72.5		
0	1(3)-11(8)-BIAPIGENIN	Flower	--	--		
1	1,3,6,7-TETRAHYDROXYXANTHONE	Plant	--	--		
1	1,3,6,7-TETRAHYDROXYXANTHONE	Leaf	--	--		
0	2,2-DIMETHYL-7-ISOBUTYL-2H,5H-PYRANO-(4,3-B)-PYRAN-5-ONE	Plant	1.5	27		
0	2,2-DIMETHYL-7-SEC-BUTYL-2H,5H-PYRANO-(4,3-B)-PYRAN-5-ONE	Plant	1	18		
0	2-METHYL-BUTENOL	Plant	--	--		
0	2-METHYL-DECANE	Shoot	--	--		
0	2-METHYL-DECANE	Leaf Essent. Oil	--	--		
0	2-METHYL-DECANE	Fruit Essent. Oil	--	--		
0	2-METHYL-OCTANE	Shoot	--	--		
0	2-METHYL-OCTANE	Leaf Essent. Oil	--	--		
0	2-METHYL-OCTANE	Fruit Essent. Oil	--	--		

Chemical Plant Part		Plant	Low PPM	High PPM	StdDev	Reference	Citation
0	5-METHYLHEPTAN-2,4-DIONE	Plant	0.25	4.5			
0	6-METHYL-HEPT-5-EN-2-ONE	Plant	1	18			
0	6-METHYLHEPTAN-2,4-DIONE	Plant	0.25	4.5			
6	ACETOPHENONE	Plant	0.1	2.25	-1		
0	ACYLPHLOROGLUCINOLS	Plant	--	--		Leung, A. Y. and Foster, S.	
						1995. Encyclopedia of	
						Common Natural Ingredients	
						2nd Ed. John Wiley & Sons,	
						New York. 649 pp.	
0	ADHYPERFOLIN	Flower	--	--			
0	ADHYPERFOLIN	Fruit	--	--			
0	ADHYPERIFORIN	Plant	2000	19000			
0	ALKANES	Shoot	--	--			
0	ALKANOLS	Shoot	--	--			
0	ALPHA-AMORPHENE	Plant	0.25	4.5	-1		
0	ALPHA-CAMPHOLENOL	Plant	0.05	0.9			
0	ALPHA-CUPRENENE	Plant	16	288			
0	ALPHA-EUDESMOL	Plant	2.5	45			
2	ALPHA-HUMULENE	Plant	1	18	-0.6057643151172428		
11	ALPHA-PHELLANDRENE	Plant	0.3	5.4	-1.1319046038135718		
28	ALPHA-PINENE	Plant	13	245	-0.3080919122446896		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
28	ALPHA-PINENE	Shoot Essent. Oil	--	--		
28	ALPHA-PINENE	Leaf Essent. Oil	--	--		
28	ALPHA-PINENE	Fruit Essent. Oil	--	--		
3	ALPHA-SELINENE	Plant	1	18	-0.5867176918752404	
13	ALPHA-TERPINENE	Plant	1	18	-0.4744627215339312	
23	ALPHA-TERPINEOL	Plant	3	54	-0.43865827127528684	
0	ALPHA-TERPINYL-ACETATE	Plant	0.1	1.8	-0.6913759776083797	
18	AMENTOFLAVONE	Shoot	--	--		
18	AMENTOFLAVONE	Flower	100	500		
3	AR-CURCUMENE	Plant	0.5	9	-0.5646161556334643	
112	ASCORBIC-ACID	Seed	395	395	-0.10131886672592849	Watt, J.M. and Breyer-Brandwijk, M.G. 1962. The Medicinal and Poisonous Plants of Southern and Eastern Africa. E. & S. Livingstone, Ltd. Edinburg & London. 1457 pp.
112	ASCORBIC-ACID	Leaf	--	--		
112	ASCORBIC-ACID	Shoot	--	16.5	-0.3703409857421204	

Chemical Plant Part			Low PPM	High PPM	StdDev	Reference	Citation
112	ASCORBIC-ACID	Plant	1300	1300	-0.28849886718467166	ANON.	1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
9	BETA-AMYRIN	Shoot	--	--			
0	BETA-BOURBONENE	Plant	0.25	4.5	-0.489936417763645		
53	BETA-CAROTENE	Shoot	--	12.1	-0.6694191722615046		
5	BETA-ELEMENE	Plant	0.25	4.5	-0.4590469964746937		
13	BETA-EUDESMOL	Plant	2	32	-1.4039137909830484		
13	BETA-PINENE	Shoot	--	--			
13	BETA-PINENE	Leaf Essent. Oil	--	--			
13	BETA-PINENE	Fruit Essent. Oil	--	--			
13	BETA-PINENE	Plant	335	6055	6.102304293563025		
3	BETA-SELINENE	Plant	1.5	27	-0.500067830640769		
47	BETA-SITOSTEROL	Plant	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
47	BETA-SITOSTEROL	Shoot	--	--		
0	BIAPIGENIN	Leaf	--	--		
0	BICYCLOLEMENE	Plant	0.1	1.8	-1	
35	BORNEOL	Plant	0.15	2.7	-0.6684962919153474	
12	BORNYL-ACETATE	Plant	0.2	3.6	-0.46669902653977585	
0	BRENZCATECHIN	Plant	--	--		
4	CADINENE	Essential Oil	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
3	CADMIUM	Leaf	1	7	1.8579388000852974	
3	CADMIUM	Plant	1	5	1.706360614699241	
3	CADMIUM	Root	1	3	2.1673447651974533	
102	CAFFEIC-ACID	Shoot	--	1000	-0.30167703804388507	
102	CAFFEIC-ACID	Plant	--	1000	-0.927639936569902	
9	CAMPHENENE	Plant	1	18	-0.5750339250011366	
0	CAROTENE	Seed	165	165	0.9999999999999998	Watt, J.M. and Breyer-Brandwijk, M.G. 1962. The Medicinal and Poisonous Plants of Southern and Eastern Africa. E. & S. Livingstone, Ltd. Edinburg & London. 1457 pp.

Chemical Plant Part		Low PPM PPM	High PPM	StdDev	Reference	Citation
0	CAROTENOIDS	Plant	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
31	CARYOPHYLLENE	Essential Oil	--	--		
31	CARYOPHYLLENE	Plant	26	468	0.04369118646892662	
6	CARYOPHYLLENE-EPOXIDE	Plant	0.5	9		
1	CATECHINS	Plant	--	--		
0	CERYL-ALCOHOL	Plant	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
77	CHLOROGENIC-ACID	Plant	--	--		
77	CHLOROGENIC-ACID	Leaf	--	--		
21	CHLOROPHYLL	Plant	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
20	CHOLINE	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Chemical Plant Part			Low PPM	High PPM	StdDev	Reference	Citation
20	CHOLINE	Shoot	34	1000	0.572012868491687		
20	CHOLINE	Leaf	--	--			
0	CINEOLE	Essential Oil	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.	
18	CINNAMIC-ACID	Plant	--	--			
0	CIS-TROLLIXANTHIN	Flower	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.	
7	CYANIDIN	Plant	--	--			
0	CYCLOPSEUDOHYPERICIN	Plant	--	--			
13	CYSTEINE	Plant	--	--			
9	DELTA-CADINENE	Plant	0.5	9	-0.5016588984240995		
1	DODECANOL	Plant	--	--		Gruenwald, J. et al. 1998. PDR for Herbal Medicine. 1st ed. Medical Economics Co., Montvale, NJ. 1244 pp. (abbreviated as PHR or Physicians Herbal Reference in my mind)	
2	ELEMOL	Plant	0.25	4.5	-0.6106083925528936		

Chemical Plant Part			Low PPM	High PPM	StdDev	Reference	Citation
0	EMODINANTHRANOL	Plant	--	--			Watt, J.M. and Breyer-Brandwijk, M.G. 1962. The Medicinal and Poisonous Plants of Southern and Eastern Africa. E. & S. Livingstone, Ltd. Edinburg & London. 1457 pp.
0	EO	Shoot	700	1250	-0.837336451901542		
0	EO	Plant	500	3500	-0.05614454808389901		
0	EO	Flower	--	2500	-0.3400918652927049		
0	EO	Seed	3300	3300	-0.5087818988509869	Watt, J.M. and Breyer-Brandwijk, M.G. 1962. The Medicinal and Poisonous Plants of Southern and Eastern Africa. E. & S. Livingstone, Ltd. Edinburg & London. 1457 pp.	
40	EPICATECHIN	Plant	--	--			
0	FAT	Seed	328000	328000	0.32980195334230034	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses	
0	FENCHOL	Plant	0.25	4.5			
61	FERULIC-ACID	Plant	--	--			
0	FLAVONOIDS	Shoot	70000	74000	1.9987386742212807		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	FLAVONOIDS	Flower	117100	117100	1.7816328615787507	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
22	GABA	Plant	--	700		
62	GALLIC-ACID	Plant	--	--		
0	GAMMA-CURCUMENE	Plant	0.5	9		
0	GAMMA-EUDESMOL	Plant	1.5	27	-1	
11	GAMMA-TERPINENE	Plant	1.5	27	-0.5229803987451376	
8	GENTISIC-ACID	Plant	--	--		
13	GERANIAL	Plant	0.35	6.3	-0.8448404627021195	
35	GERANIOL	Plant	4	72	-0.4372882513568854	
5	GERANYL-ACETATE	Plant	24	432	-0.046931008281076325	
5	GLUTAMINE	Plant	--	--		
3	GUAIOL	Plant	1.5	27	-1	
0	GURJUNENE	Plant	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	HEXACOSAN-1-OL	Leaf	--	--		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
2	HUMULENE	Plant	--	--		
2	HUMULENE	Essential Oil	--	--		
0	HYPRESIN-1	Plant	--	--		
0	HYPRESIN-2	Plant	--	--		
7	HYPFORIN	Fruit	--	--		
7	HYPFORIN	Flower	--	27930		
7	HYPFORIN	Leaf	--	--		
7	HYPFORIN	Plant	20000	45000		
7	HYPFORIN	Shoot	--	--		
26	HYPERICIN	Flower Essent. Oil	5	19		
26	HYPERICIN	Cotyledon	--	14.5		
26	HYPERICIN	Fruit	--	730		
26	HYPERICIN	Essential Oil	--	2200		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
26	HYPERICIN	Plant	5000	7000		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
26	HYPERICIN	Shoot	390	1780		
26	HYPERICIN	Stem	40	210		
26	HYPERICIN	Leaf	190	1950		
26	HYPERICIN	Flower	860	18000		
0	HYPERICINS	Plant	95	4660		
0	HYPERICODIHYDROANTHONE	Plant	--	--		Watt, J.M. and Breyer-Brandwijk, M.G. 1962. The Medicinal and Poisonous Plants of Southern and Eastern Africa. E. & S. Livingstone, Ltd. Edinburg & London. 1457 pp.
0	HYPERIFOLIN	Plant	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
14	HYPERIN	Plant	3500	5500		
30	HYPEROSIDE	Flower	--	6570	1.3767817207229411	
30	HYPEROSIDE	Plant	3500	20000	1.4142135623730945	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
30	HYPEROSIDE	Shoot	5000	40000	1	
30	HYPEROSIDE	Leaf	--	--		
30	HYPEROSIDE	Stem	--	--		
0	I3,II8-BIAPIGENIN	Flower	100	500		
0	I3,II8-BIAPIGENIN	Plant	--	2600	Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.	
1	IMANIN	Shoot	--	--		
1	IMANIN	Plant	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.	
0	ISHWARANE	Plant	0.5	9		
4	ISOFERULIC-ACID	Plant	--	--		
0	ISOHYPERICIN	Plant	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.	
3	ISOQUERCETIN	Plant	--	--	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.	

Chemical Plant Part		Plant	Low PPM	High PPM	StdDev	Reference	Citation
0	ISOQUERCITIN	Plant	--	--			
22	ISOQUERCITRIN	Plant	--	3000	1		
22	ISOQUERCITRIN	Flower	--	--			
0	ISOVALERIANIC-ACID	Plant	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996.	Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
0	ISOVALERIC-ACID-ESTER	Plant	--	--		List, P.H. and Horhammer, L.	Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
75	KAEMPFEROL	Plant	--	--			
0	KIELCORIN	Root	--	--			
0	KIELCORIN	Plant	--	--			
0	KILECORIN	Plant	--	--		Leung, A. Y. and Foster, S.	1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	LEAD	Leaf	6	18	-0.2544918195433336		
0	LEAD	Plant	2	12	-0.2052748805139635		
0	LEAD	Root	4	5	0.5725881018723528		

Chemical Plant Part		Plant	Low PPM	High PPM	StdDev	Reference	Citation
2	LEUCINE	Plant	--	--			
1	LEUCOCYANIDIN	Plant	--	--		Leung, A. Y. and Foster, S.	
						1995. Encyclopedia of	
						Common Natural Ingredients	
						2nd Ed. John Wiley & Sons,	
						New York. 649 pp.	
60	LIMONENE	Fruit Essent. Oil	--	--			
60	LIMONENE	Plant	5	90	-0.43049106807161513		
60	LIMONENE	Shoot	--	--			
60	LIMONENE	Leaf Essent. Oil	--	--			
53	LINALOOL	Plant	2.5	45	-0.6582300842221918		
15	LUTEIN	Flower	--	--		List, P.H. and Horhammer, L.,	
						Hager's Handbuch der	
						Pharmazeutischen Praxis,	
						Vols. 2-6, Springer-Verlag,	
						Berlin, 1969-1979.	
78	LUTEOLIN	Plant	--	--		Newall, C. A., Anderson, L. A.	
						and Phillipson, J. D. 1996.	
						Herbal Medicine - A Guide for	
						Health-care Professionals.	
						The Pharmaceutical Press,	
						London. 296pp.	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	LUTEOXANTHIN	Flower	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	LYSINE	Plant	--	--		
18	MANGIFERIN	Shoot	--	--		
18	MANGIFERIN	Plant	--	--		
0	MANGIFERIN(SIC)	Plant	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
18	MANNITOL	Plant	11000	20000	1	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	METHYL-2-DECANE	Plant	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
0	METHYL-2-OCTANE	Essential Oil	--	164000		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	METHYL-3-BUT-3-EN-2-OL	Plant	--	--		Gruenwald, J. et al. 1998. PDR for Herbal Medicine. 1st ed. Medical Economics Co., Montvale, NJ. 1244 pp. (abbreviated as PHR or Physicians Herbal Reference in my mind)
0	METHYL-GERANATE	Plant	0.3	5.4		
22	MYRCENE	Shoot	--	--		
22	MYRCENE	Plant	10	190	-0.26735798519548487	
22	MYRCENE	Leaf Essent. Oil	--	--		
22	MYRCENE	Fruit Essent. Oil	--	--		
22	MYRCENE	Essential Oil	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
34	MYRICETIN	Plant	--	--		
0	MYRICETIN-3-O-BETA-D-GLUCOSIDE	Plant	--	--		
6	MYRISTIC-ACID	Plant	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.

Chemical Plant Part		Low PPM PPM	High PPM	StdDev	Reference	Citation
1	N-DECANAL	Essential Oil	--	--		
0	N-NONANE	Shoot	--	--		
0	N-NONANE	Leaf Essent. Oil	--	--		
0	N-NONANE	Essential Oil	--	--	Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.	
0	N-NONANE	Fruit Essent. Oil	--	--		
2	N-OCTANAL	Essential Oil	--	--		
0	N-OCTANOL	Essential Oil	--	--	Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.	
0	N-UNDECANE	Shoot	--	--		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	N-UNDECANE	Leaf Essent. Oil	--	--		
0	N-UNDECANE	Fruit Essent. Oil	--	--		
0	NEO-ALLOOCIMENE	Plant	0.3	5.4		
4	NERAL	Plant	0.35	6.3	-0.7605971244477834	
10	NEROL	Plant	1	18	-0.4305189847416696	
5	NERYL-ACETATE	Plant	1	18	-0.5533167201767719	
11	NICOTINIC-ACID	Leaf	0.007	1200	0.8574828309219877	
2	NONACOSANE	Plant	--	--		
0	NONANE	Plant	23	414	1.7320463017310814	
0	NOR-CYCLOPSEUDOHYPERICIN	Plant	--	--		
0	NOVOIMANIN	Shoot	30000	40000		
0	NOVOIMANIN	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	OCT-1-ENE	Plant	1.5	17		
0	OCTACOSAN-1-OL	Leaf	--	--		

Chemical Plant Part		Plant	Low PPM	High PPM	StdDev	Reference	Citation
25	OPCS	Plant	--	--		Gruenwald, J. et al. 1998. PDR for Herbal Medicine. 1st ed. Medical Economics Co., Montvale, NJ. 1244 pp. (abbreviated as PHR or Physicians Herbal Reference in my mind)	
5	ORNITHINE	Plant	--	--			
25	P-COUMARIC-ACID	Plant	--	--			
16	P-CYMENE	Plant	0.5	9	-0.4179122586089107		
13	P-HYDROXY-BENZOIC-ACID	Plant	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.	
13	PALMITIC-ACID	Plant	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.	
24	PECTIN	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.	
0	PERFLAVIT	Shoot	--	--			
26	PHENOL	Plant	--	--			

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	PHLOBAPHENE	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	PHLOROGLUCINOL	Shoot	--	--		
8	PHLOROGLUCINOL	Plant	--	--		
2	PHYTOSTEROLS	Plant	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
12	PINENE	Essential Oil	--	--		
0	PINOL	Plant	0.05	0.9		
34	PROANTHOCYANIDINS	Plant	--	120000		
27	PROCYANIDINS	Plant	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	PROLINE	Plant	--	--		
0	PROTEIN	Seed	181000	207000	-0.23836489772194505	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTOHYPERICIN	Plant	--	--		

Chemical Plant Part		Plant	Low PPM	High PPM	StdDev	Reference	Citation
0	PROTOPSEUDOHYPERICIN	Plant	--	--			
0	PROVITAMIN-A	Plant	130	130			ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	PSEUDOHYPERICIN	Shoot	--	40			
2	PSEUDOHYPERICIN	Plant	--	--			
2	PSEUDOHYPERICIN	Cotyledon	--	164.9			
2	PSEUDOHYPERICIN	Leaf	--	--			
2	PSEUDOHYPERICIN	Flower	2260	5800			
0	PSEUDOHYPERICODIHYDROANTHRONE	Plant	--	--			Watt, J.M. and Breyer-Brandwijk, M.G. 1962. The Medicinal and Poisonous Plants of Southern and Eastern Africa. E. & S. Livingstone, Ltd. Edinburg & London. 1457 pp.
23	PYROGALLOL	Plant	--	--			
176	QUERCETIN	Leaf	--	--			
176	QUERCETIN	Stem	--	--			
176	QUERCETIN	Flower	--	1000	0.9439875157035426		
176	QUERCETIN	Plant	--	20000	1		
176	QUERCETIN	Shoot	--	--			

Chemical	Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	QUERCETIN-3-O-GLUCURONIDE	Shoot	--	--			
0	QUERCETIN-3-O-GLUCURONIDE	Plant	--	--			
0	QUERCETIN-3-O-XYLOSIDE	Shoot	--	--			
0	QUERCETIN-3-O-XYLOSIDE	Plant	--	--			
44	QUERCITRIN	Shoot	3000	5240	-1		
44	QUERCITRIN	Flower	--	3380			
44	QUERCITRIN	Plant	--	--			
44	QUERCITRIN	Leaf	--	--			
0	RESORCYNOL	Plant	--	--			
0	RHODAN	Plant	--	--		Leung, A. Y. and Foster, S.	
						1995. Encyclopedia of	
						Common Natural Ingredients	
						2nd Ed. John Wiley & Sons,	
						New York. 649 pp.	
87	RUTIN	Plant	--	16000	-0.4415440806455522		
87	RUTIN	Shoot	--	10000	0.17325822920583467		
87	RUTIN	Stem	--	--			
87	RUTIN	Leaf	2000	3000	-0.8182983793201679		
87	RUTIN	Flower	1000	2800	-0.7206034752837803		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
						PPM
0	SAPONIN	Seed	--	--		Watt, J.M. and Breyer-Brandwijk, M.G. 1962. The Medicinal and Poisonous Plants of Southern and Eastern Africa. E. & S. Livingstone, Ltd. Edinburg & London. 1457 pp.
44	SCOPOLETIN	Plant	--	--		
0	SELINA-4,11-DIENE	Plant	0.15	2.7	-1	
0	SITOSTEROL	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	STEARIC-ACID	Plant	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	TANNINS	Flower	--	162000	-1.414213562373095	
0	TANNINS	Shoot	--	3300	-1	
0	TANNINS	Leaf	--	124000	0.3789365602623973	
0	TANNINS	Plant	30000	160000	0.6335167585895222	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	TANNINS	Seed	121000	121000	1.4090882261939848	Watt, J.M. and Breyer-Brandwijk, M.G. 1962. The Medicinal and Poisonous Plants of Southern and Eastern Africa. E. & S. Livingstone, Ltd. Edinburg & London. 1457 pp.
0	TANNINS	Stem	--	38000		
2	TARAXASTEROL	Shoot	--	--		
23	TERPINEN-4-OL	Plant	0.5	9	-0.2775675416087286	
0	TERPINEOLENE	Plant	1.5	27	1	
0	TETRACOSAN-1-OL	Leaf	--	--		
4	THREONINE	Plant	--	--		
1	TRIACONTAN-1-OL	Leaf	--	--		
0	TROLLICHROME	Flower	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
22	UMBELLIFERONE	Plant	--	--		
0	UNDECANE	Plant	0.25	4.5	1.6819265754924004	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
24	VANILLIC-ACID	Plant	--	--	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996.	Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
2	VIOLAXANTHIN	Flower	--	--	List, P.H. and Horhammer, L.	Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
6	XANTHONES	Plant	--	12.8		